

CLAIMS

What is claimed is:

- 1 1. A method of executing a risk-assessment scan with a variable timeout  
2 duration which is set based on network conditions, comprising:  
3 a) measuring network conditions in a network coupled between a source and a  
4 target;  
5 b) executing a risk-assessment scan on the target from the source; and  
6 c) performing a timeout prior to making a determination that the target is failing  
7 to respond to the risk-assessment scan;  
8 d) wherein the timeout includes a variable duration which is set as a function of  
9 the measured network conditions.
- 1 2. The method as recited in claim 1, wherein the network conditions include  
2 latency associated with communication between the source and the target.
- 1 3. The method as recited in claim 1, wherein measuring the network conditions  
2 includes transmitting a probe signal from the source to the target utilizing the  
3 network.
- 1 4. The method as recited in claim 3, wherein the probe signal prompts the target  
2 to send a response signal to the source utilizing the network.
- 1 5. The method as recited in claim 4, wherein measuring the network conditions  
2 further includes receiving the response signal from the target utilizing the  
3 network.

- 1 6. The method as recited in claim 5, wherein measuring the network conditions  
2 further includes measuring a response duration between the transmission of  
3 the probe signal and the receipt of the response signal.
- 1 7. The method as recited in claim 6, wherein the timeout is set as a function of  
2 the response duration.
- 1 8. The method as recited in claim 1, wherein the timeout is set by adding a  
2 default value with a variable value which is set as a function of the measured  
3 network conditions.
- 1 9. The method as recited in claim 1, wherein the timeout is set by multiplying a  
2 default value with a variable factor which is set as a function of the measured  
3 network conditions.
- 1 10. The method as recited in claim 1, wherein executing the risk-assessment scan  
2 includes executing a plurality of risk-assessment scan modules.
- 1 11. The method as recited in claim 10, wherein the timeout is performed for each  
2 of the risk-assessment scan modules.
- 1 12. The method as recited in claim 1, and further comprising storing a result of  
2 the measurement of the network conditions.
- 1 13. The method as recited in claim 1, and further comprising abandoning the  
2 risk-assessment scan if the target fails to respond to the risk-assessment scan  
3 within the variable duration.
- 1 14. A computer program product for executing a risk-assessment scan with a  
2 variable timeout duration which is set based on network conditions,  
3 comprising:

- 4 a) computer code for measuring network conditions in a network coupled  
5 between a source and a target;  
6 b) computer code for executing a risk-assessment scan on the target from the  
7 source; and  
8 c) computer code for performing a timeout prior to making a determination that  
9 the target is failing to respond to the risk-assessment scan;  
10 d) wherein the timeout includes a variable duration which is set as a function of  
11 the measured network conditions.

1 15. The computer program product as recited in claim 14, wherein the network  
2 conditions include latency associated with communication between the  
3 source and the target.

1 16. The computer program product as recited in claim 14, wherein measuring the  
2 network conditions includes transmitting a probe signal from the source to  
3 the target utilizing the network.

1 17. The computer program product as recited in claim 16, wherein the probe  
2 signal prompts the target to send a response signal to the source utilizing the  
3 network.

1 18. The computer program product as recited in claim 17, wherein measuring the  
2 network conditions further includes receiving the response signal from the  
3 target utilizing the network.

1 19. The computer program product as recited in claim 18, wherein measuring the  
2 network conditions further includes measuring a response duration between  
3 the transmission of the probe signal and the receipt of the response signal.

1 20. The computer program product as recited in claim 19, wherein the timeout is  
2 set as a function of the response duration.

- 1 21. The computer program product as recited in claim 14, wherein the timeout is  
2 set by adding a default value with a variable value which is set as a function  
3 of the measured network conditions.
- 1 22. The computer program product as recited in claim 14, wherein the timeout is  
2 set by multiplying a default value with a variable factor which is set as a  
3 function of the measured network conditions.
- 1 23. The computer program product as recited in claim 14, wherein executing the  
2 risk-assessment scan includes executing a plurality of risk-assessment scan  
3 modules.
- 1 24. The computer program product as recited in claim 23, wherein the timeout is  
2 performed for each of the risk-assessment scan modules.
- 1 25. The computer program product as recited in claim 14, and further comprising  
2 computer code for storing a result of the measurement of the network  
3 conditions.
- 1 26. The computer program product as recited in claim 14, and further comprising  
2 computer code for abandoning the risk-assessment scan if the target fails to  
3 respond to the risk-assessment scan within the variable duration.
- 1 27. The computer program product as recited in claim 14, wherein the network  
2 conditions are measured for a network segment, and the measured network  
3 conditions are used to set the timeout for a plurality of targets located on the  
4 network segment.
- 1 28. A system for executing a risk-assessment scan with a variable timeout  
2 duration which is set based on network conditions, comprising:

- 3 a) logic for measuring network conditions in a network coupled between a
- 4 source and a target;
- 5 b) logic for executing a risk-assessment scan on the target from the source; and
- 6 c) logic for performing a timeout prior to making a determination that the target
- 7 is failing to respond to the risk-assessment scan;
- 8 d) wherein the timeout includes a variable duration which is set as a function of
- 9 the measured network conditions.

- 1 29. A method of executing a risk-assessment scan with a variable timeout
- 2 duration which is set based on network conditions, comprising:
- 3 a) transmitting a probe signal from a source to a target utilizing a network, the
- 4 probe signal prompting the target to send a response signal to the source
- 5 utilizing the network;
- 6 b) receiving the response signal from the target utilizing the network;
- 7 c) measuring a response duration between the transmission of the probe signal
- 8 and the receipt of the response signal;
- 9 d) executing a risk-assessment scan including a plurality of risk-assessment
- 10 scan modules;
- 11 e) performing a timeout prior to making a determination that the target is failing
- 12 to respond to each of the risk-assessment scan modules, wherein the timeout
- 13 includes a variable duration which is set as a function of the response
- 14 duration; and
- 15 f) abandoning the risk-assessment scan modules if the target fails to respond to
- 16 the risk-assessment scan modules within the variable duration.

- 1 30. A computer program product for executing a risk-assessment scan with a
- 2 variable timeout duration which is set based on network conditions,
- 3 comprising:
- 4 a) computer code for transmitting a probe signal from a source to a target
- 5 utilizing a network, the probe signal prompting the target to send a response
- 6 signal to the source utilizing the network;

- 7 b) computer code for receiving the response signal from the target utilizing the  
8 network;
- 9 c) computer code for measuring a response duration between the transmission  
10 of the probe signal and the receipt of the response signal;
- 11 d) computer code for executing a risk-assessment scan including a plurality of  
12 risk-assessment scan modules;
- 13 e) computer code for performing a timeout prior to making a determination that  
14 the target is failing to respond to each of the risk-assessment scan modules,  
15 wherein the timeout includes a variable duration which is set as a function of  
16 the response duration; and
- 17 f) computer code for abandoning the risk-assessment scan modules if the target  
18 fails to respond to the risk-assessment scan modules within the variable  
19 duration.